

# Mink3a protein sequence

```

1  MGD PAPARSLDDIDLSALRDPAGIFELVEVVGNGTYGQVYKGRHVKTGQLAAIKVMDVTE
61  DEEEEIKQEINMLKKYSHRNIATYYGAFIKKSPPGNDDQLWLVMFCGAGSVTDLVKNT
121 KGNALKEDCIAIYICREILRGLAHLHAHKVIRHDIKQNVLLTENAEVKLVDFGVSAQLDR
181 TVGRRNTFIGTPYWMAPEVIACDENPDATYDYSIDIWSLGITAIEMAE GAPPLCDMHPMR
241 ALFLIPRNPPLRLSKKWSKFDIDFTCLIKTYLSRPPTTEQLLKFPFIRDQPTERQVRI
301 QLKDHIDRSRKKRGEKEETEYYSGSEEDDSHGEEGEPSSIMNVPGESTLRREFLRLQQ
361 ENKNSSEALKQQQQQQQQQORDPEAHIKHLLHQRQRRIEEQKEERRRVEEQQRREREQRK
421 LQEKEQQRRLDMQALRREERROAEREQEYKQKQLEEQRQSERLQRLQQLQEHAYLKSQ
481 QQQQQQQQLQKQQQQQQLPGDRKPLYHYGRGMNPADKPAWAREVEERTRMNKQONSPLAKS
541 KPGSTGPEPPIPIQASPGPPGPLSQTPPMQRPVEPQEGPHKSLQDQPTRNLAAFPASHDPD
601 PAIPAPTATPSARGAVIRQNSDPTSEGGPGSPNPAPWVRPDNEAPPKVPQRTSSIAATALN
661 TSGAGGSRPAQAVRARPRNSAWQIYLQRRRAERGTPKPPGPPAQPFGPPNASSNPDLRRS
721 DPGWERSDSVLPASHGHLPLQAGSLERNRVGASSKLDSSPVLSPGNKAKPDDHRSRPRGA
781 DFLVLLKERTLDEAPRPPKAMDYSSSSEEVESSEDEEEGEGGPAEGSRDTPGGRSDGDT
841 DSVSTMVVDVEEITGTQPPYGGGTMVVQRTPEEERNLLHADSNGYTNLPDVVQPSHSPT
901 ENSKGQSPPSKDGSGDYQSRGLVKAPGKSFTMFVDLGIYQPGSGDSIPITALVGEGGT
961 RLDQLQYDVRKGSVVNVNPTNTRAHSETPEIRKYKKRFNSEILCAALWGVNLLVGTENGL
1021 MLLDRSGQKQVYGLIGRRRFQOMDVLEGLNLLITISGKRNKLRVYYLSWLRNKLHNDPE
1081 VEKKQGWTTVGDMEGCGHYRVVKYERIKFLVIALKSSVEVYAWAPKPYHKFMAFKSFADL
1141 PHRPLLVDLTVEEGQRLKVIYSSAGEHAVDSDSGNSYDIYIPVHIQSQITPHAIIFLEN
1201 TDGMEMLLCYEDEGVYVNTYGRICKDVVLQWGEMPTSVAYICSNQIMGWGEKAIEIRSVE
1261 TGHLDGVFMHKRAQLKFLCERNDKVFFASVRSRGSSQVYFMTLNRNCIMNW

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## Mink3a nucleotide sequence

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AGCCTGGACGACATCGACCTGTCCGCCCTGCGGGACCTGCTGGGATCTTTGAGCTTGTG
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Fig. 1

Sheet 1

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### Mink3b protein sequence

1 MDVTEDEEEEEIKQEINMLKKYSHRNIAITYYGAFIKKSPPGNDDQLWLVMFCGAGSVTD  
 61 LVKNTKGNALKEDCIAYICREILRGLAHLHAHKVIHRDIKQNVLLTENAIEVKLVDFGVS  
 121 AQLDRVTGRRNTFIGTPYWMapeVIACDENPDATYDYSRDIWSLGITAIEMAEGAPPLCD  
 181 MHPMRALFLIPRNPPLRLSKKWSKKFIDFIDTCLIKTYLSRPPTQLLKFPFIRDQTE  
 241 RQVRIQLKDHIDRSRKKRGEKEETEYYSGSEEEEDSHGEEGEPSSIMNVPGESTLRREF  
 301 LRLQQENKSNSEALKQQQQQLQQQQQORDPEAHIKHLLHQRRRIEEQKEERRRVEEQQORRE  
 361 REQRKLOEKEQQRLEDMLRREEERRQAEREQEYKRKQLEEQRQSERLQRQLQOEHAHAY  
 421 LKSLQQQQQQQQLQKQQQQQLLPGRKPLYHYGRGMNPADKPAWAREVEERTRMNKQONS  
 481 PLAKSKPGSTGPEPPIQASPGPPGPLSQTPPMQRPVEPQEGPHKSLVAHRVPLKPYAAP  
 541 VPRSQSLQDQPTRNLAAFPASHDPDAIPAPTATPSARGAVIRONSDPTSEGPSPNPFP  
 601 AWVRPDNEAPPKVPQRTSSIALNTSGAGGSRPAQAVRARPRNSAWQIYLQRRARERT  
 661 PKPPGPAPQPPGPNASSNPDLRRSDPGWERSDSVLPASHGHLPLQAGSLERNRVGASSKL  
 721 DSSPVLSPGNKAKPDDHRSRPGRPVAVSHLVAGMACLILVWGLASGCWVSGVGSPLIYREG  
 781 LWGWRDWCFSWC

### Mink3b nucleotide sequence

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### Mink3c protein sequence

1 MDVTEDEEEEIKQEINMLKKYSHRNIAITYYGAFIKKSPPGNDDQLWLVMEFCGAGSVTD  
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 361 REQRLQKEKEQORRLQEDMQLRREEERRQAEREQEYKRKQLEEQRQSERLQRLQOEHA  
 421 LKSLQQQQQQQQLQKQQQQQLLPGRKPLYHYGRGMNPADKPAWAREVEERTRMNKQONS  
 481 PLAKSKPGSTGPEPPIPOASPGPPGPLSQTPPMQRPVEPQEGPHKSLVAHRVPLKPYAAP

Fig. 1

Sheet 3

541 VPRSQSLQDQPTRNLAAFPASHDPDPAIPAPTATPSARGAVIRQNSDPTSEGPSPNP  
601 AWVRPDNEAPPKVPQRTSSIIATALNTSGAGGSRPAQAVRARPRNSAWQIYLQRRERGT  
661 PKPPGPPAQPQPPPNASSNPDLRRSDPGWERSDSVLPAASHGHLPPQAGSLERNRVGASSKL  
721 DSSPVLSPGNKAKPDDHRSRPGRPADFVLLKERTLDEAPRPPKAMDYSSSEEVESSED  
781 DEEEGEGGPAEGSRDTPGGRDGDSTDVSTMVVDVEEITGTQPPYGGGTMVQRTPEEER  
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901 LGIYQPGSGDSIPITALVGGEGTRLDQLQYDVRKGSVVNVNPTNTRAHSETPEIRKYKK  
961 RFNSEILCAALWGVNLLVGTENGLMLLLDRSGQKQVYGLIGRRRFQQMDVLEGLNLLITIS  
1021 GKRNLKRVYYLSWLRNKLHNDPEVEKKQGWTTVGDMEGCGHYRVVKYERIKFLVIALKS  
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1141 SYDIYIPVHIQSQITPHAIIFLPNTDGMEMLLCYEDEGVYVNTYGRIIKDVVLQWGEMPT  
1201 SVAYICSNQIMGWGEKAIERSVETGHLDDGVFMHKRAQRLKFLCERNDKVFFASVRS  
1261 SQVYFMTLNRNCIMNW

### Mink3c nucleotide sequence

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Fig. 1

Sheet 5

# The structure of Mink proteins

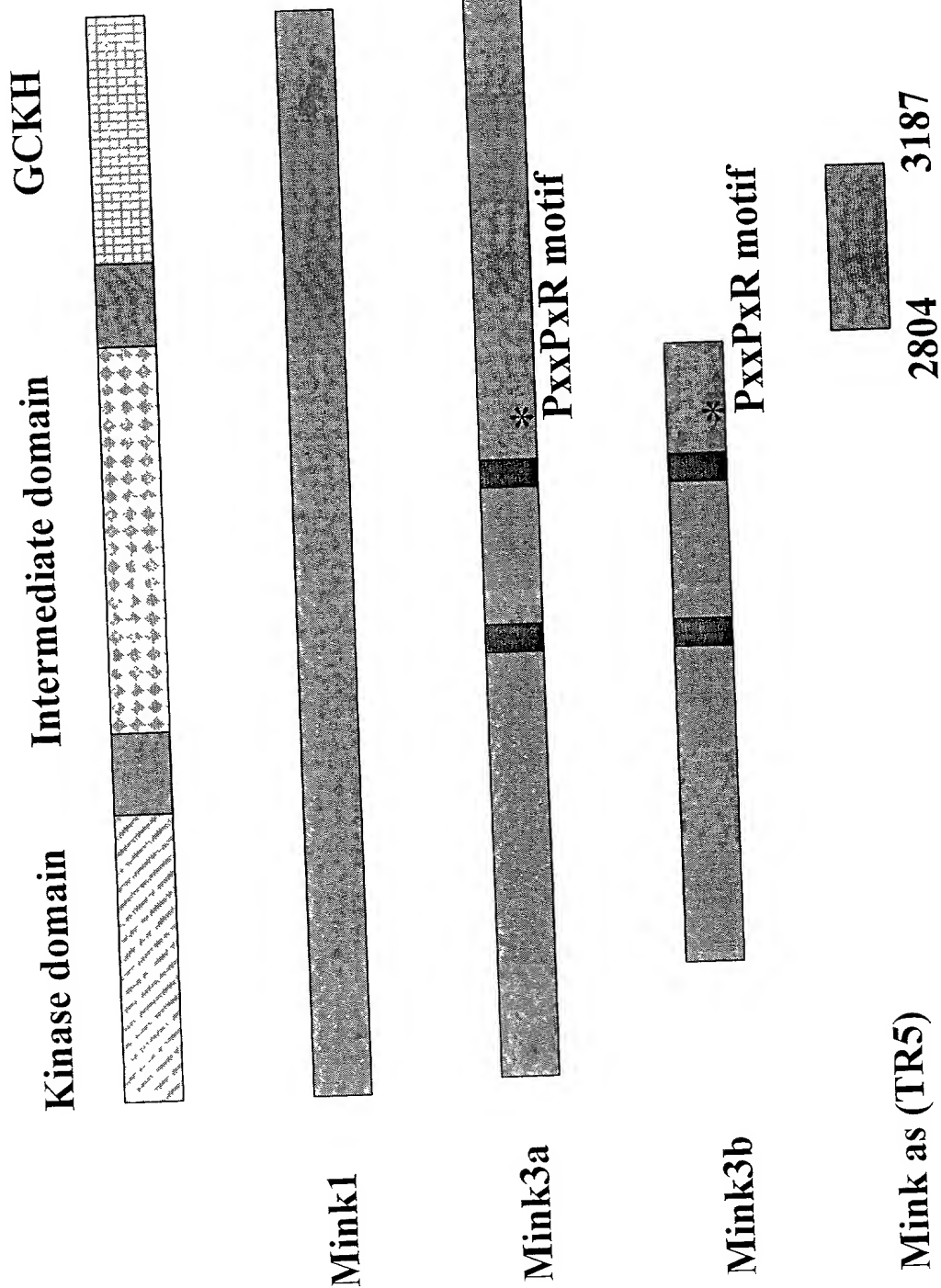


Fig. 2

## TR5 inhibits the transcriptional activity of AP1-luciferase reporter gene in 293 cells

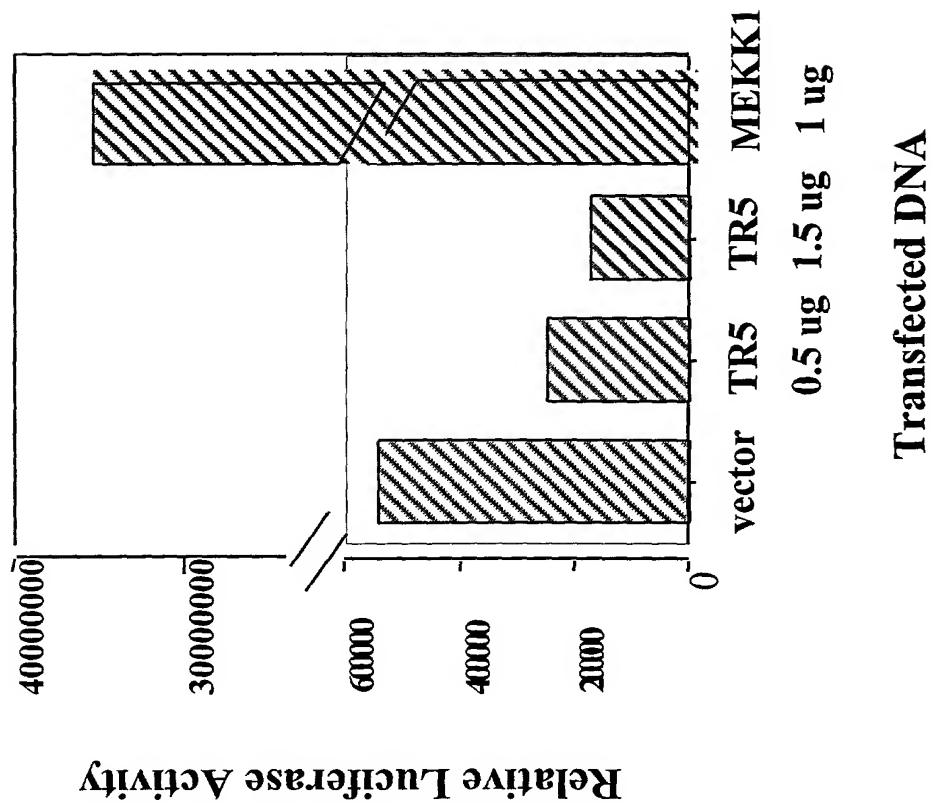


Fig. 3

# Signal pathways regulating Taxol-mediated apoptosis

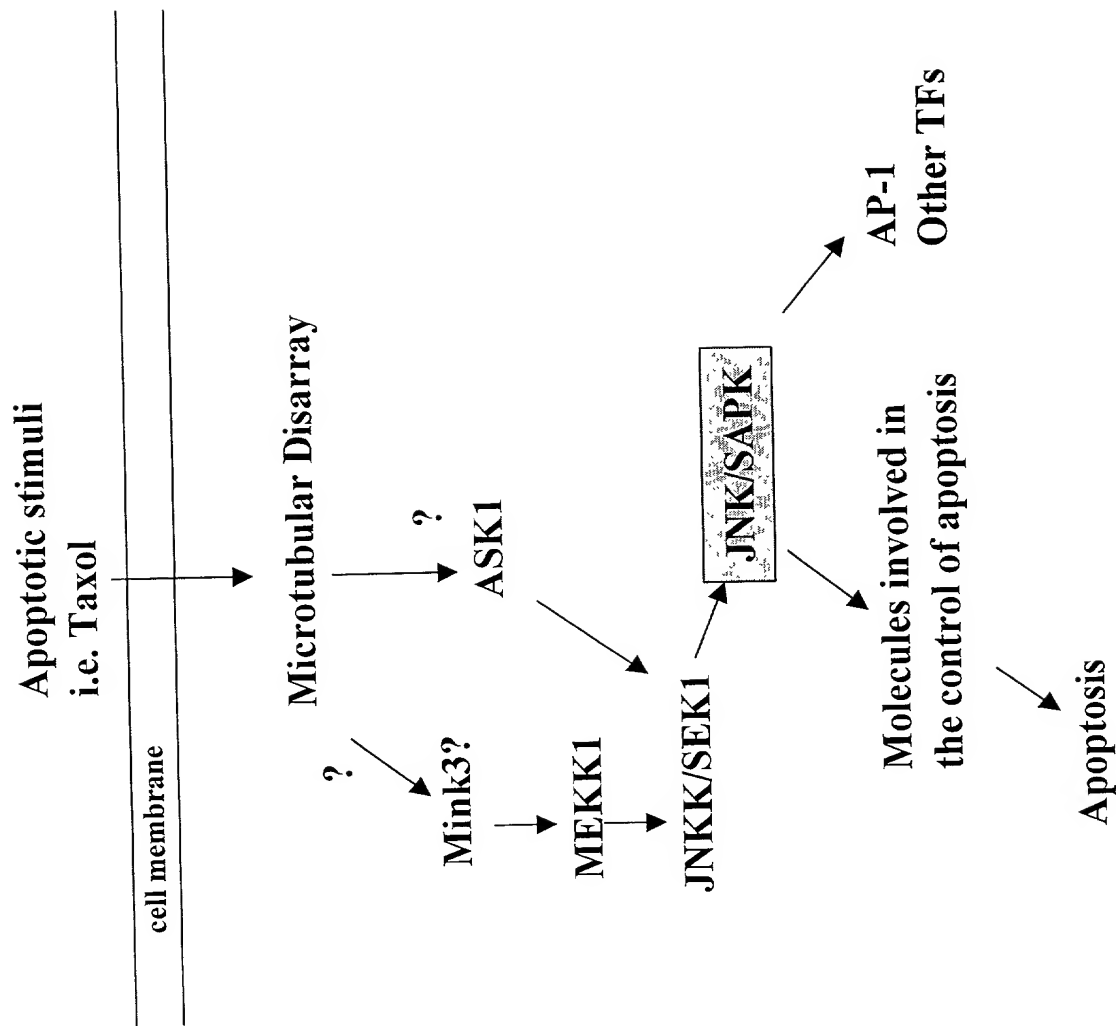


Fig. 4



# The signal transduction of MAPK pathways

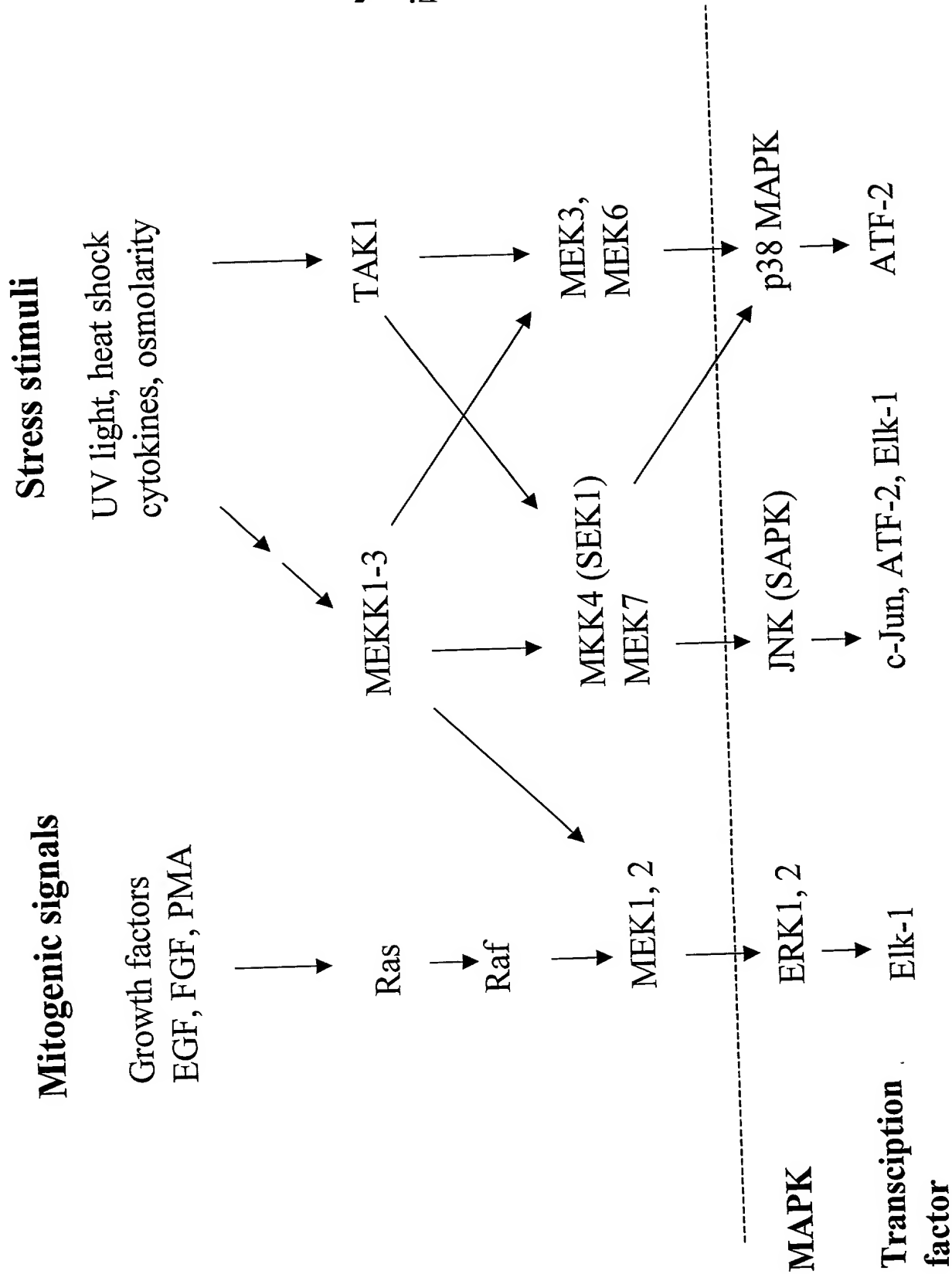


Fig. 5

# The MAPK signaling pathway

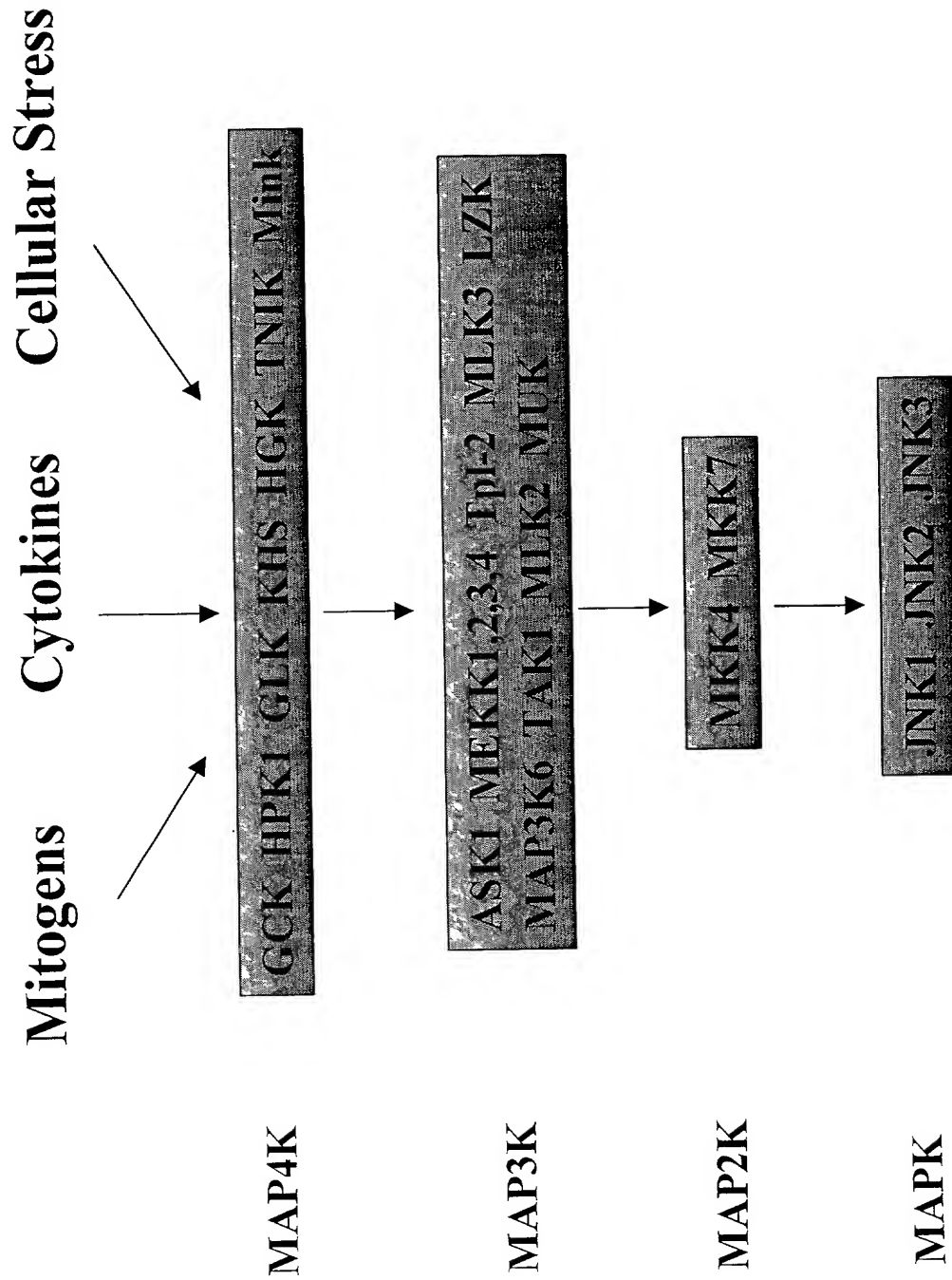


Fig. 6

# 3<sup>λ</sup> Expression antisense of Mink confers Taxol-resistance in Hela cells

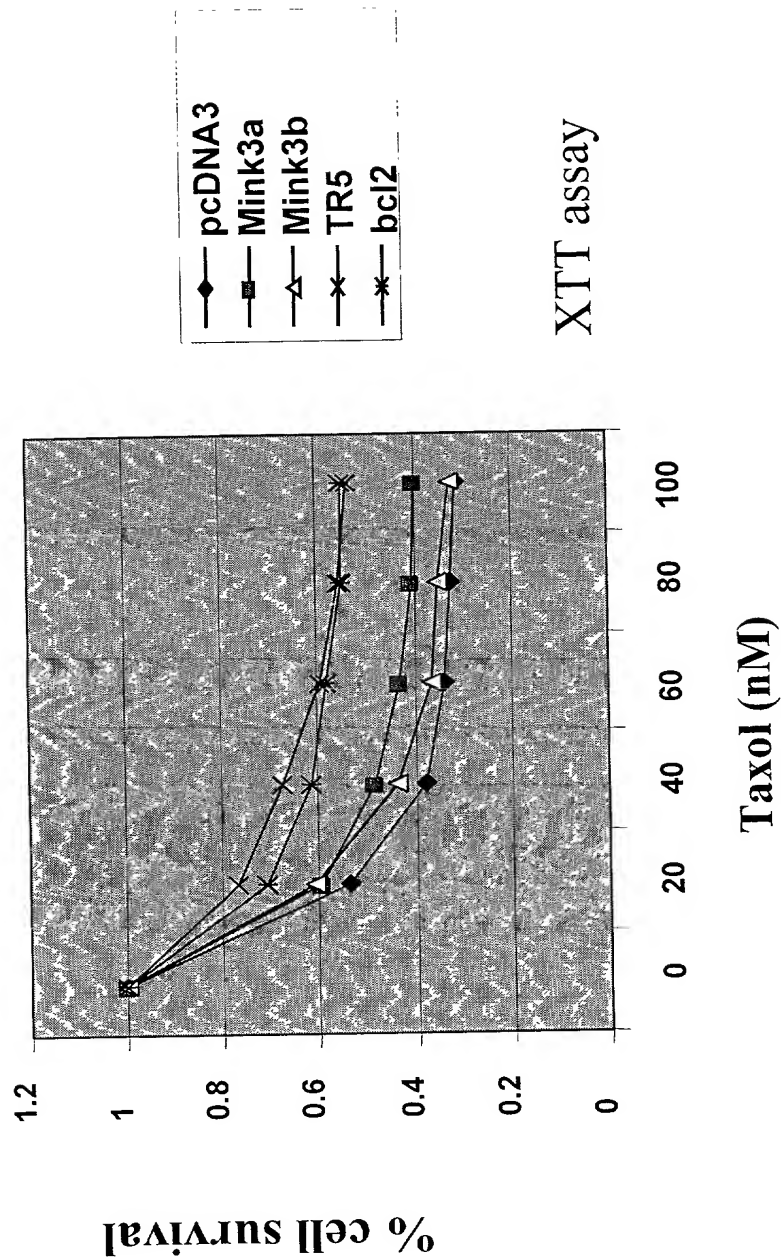


Fig. 7

# Expression of Mink3a in A549 cells slows down the cell growth in low serum medium

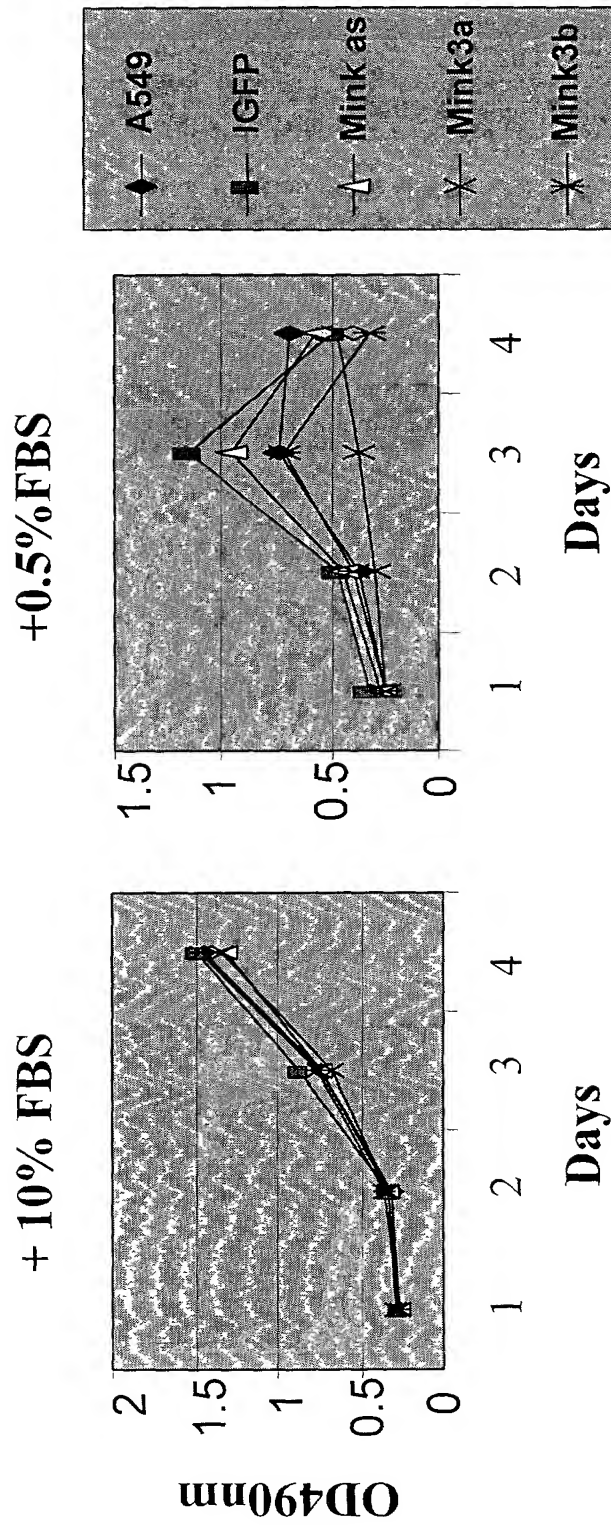


Fig. 8

## Expression of antisense of Mink inhibits EGF-mediated induction of ERK signal pathway

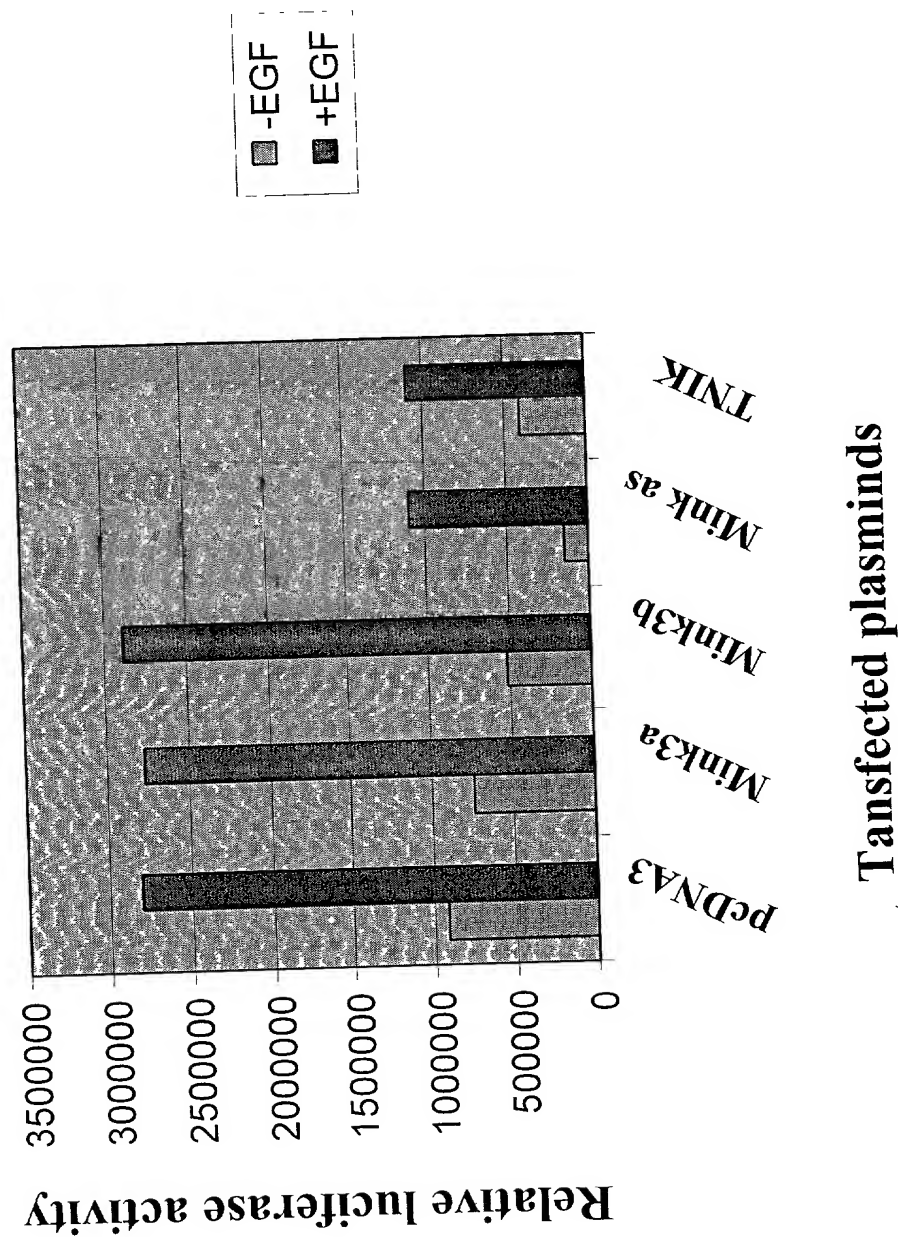


Fig. 9

# TR5 and Bcl2 block Taxol-induced cleavage of Rb protein

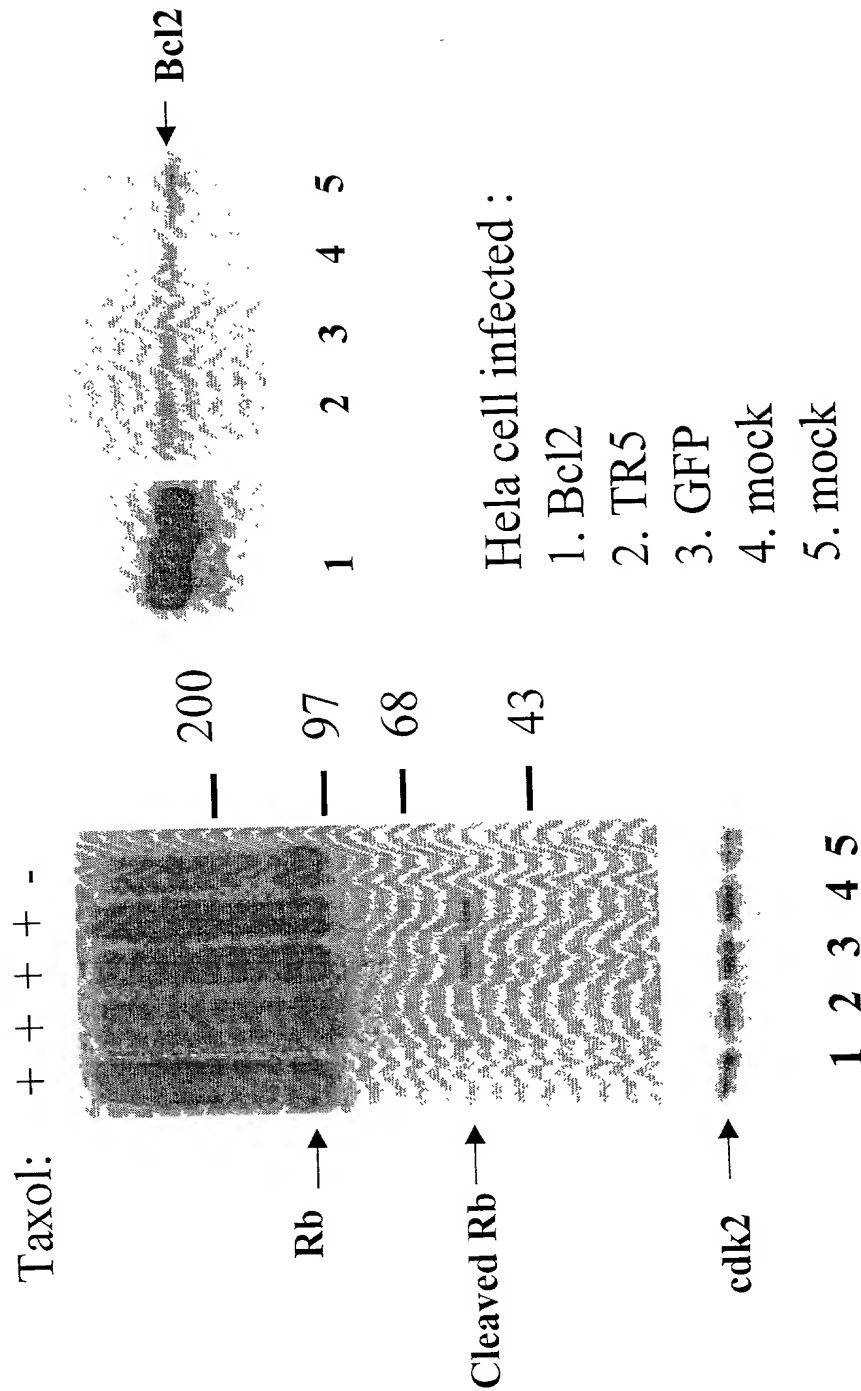


Fig. 10

# Expression of Mink3 message in human tissue

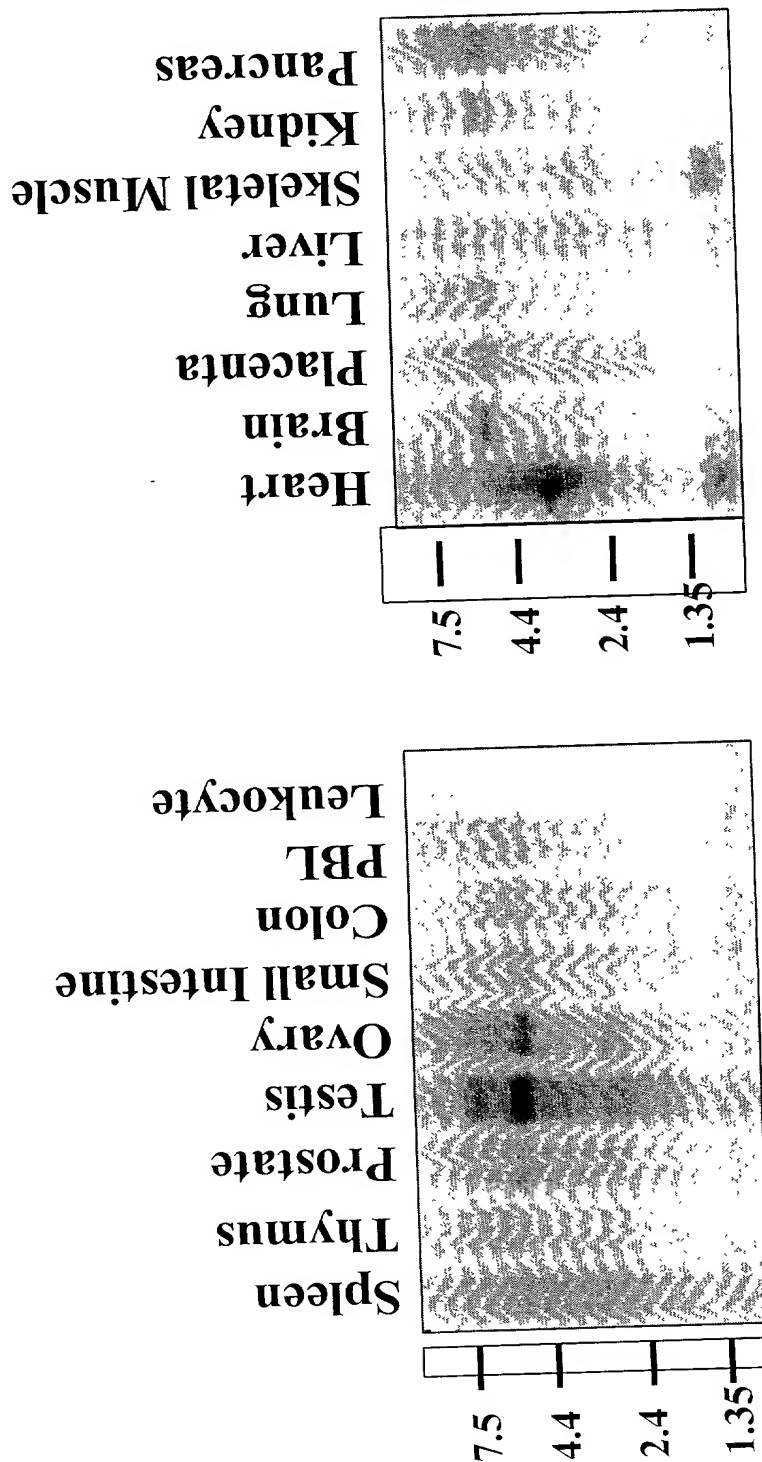


Fig. 11

# Expression of Mink3 message in tumor cell lines

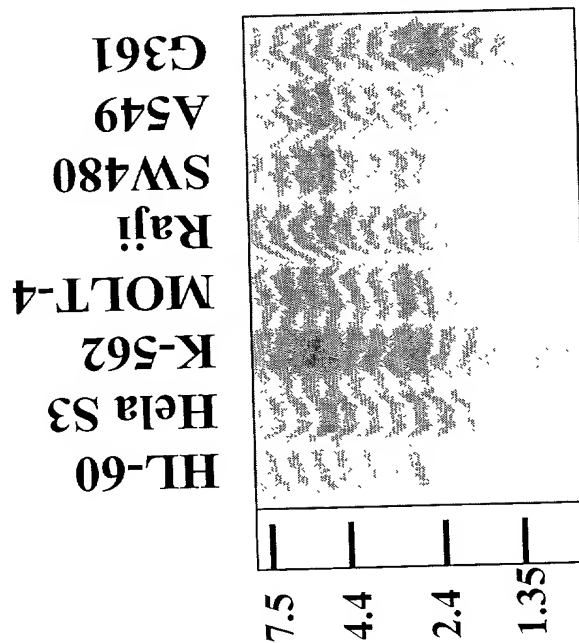


Fig. 12



# Mink3a activates JNK and ERK pathways

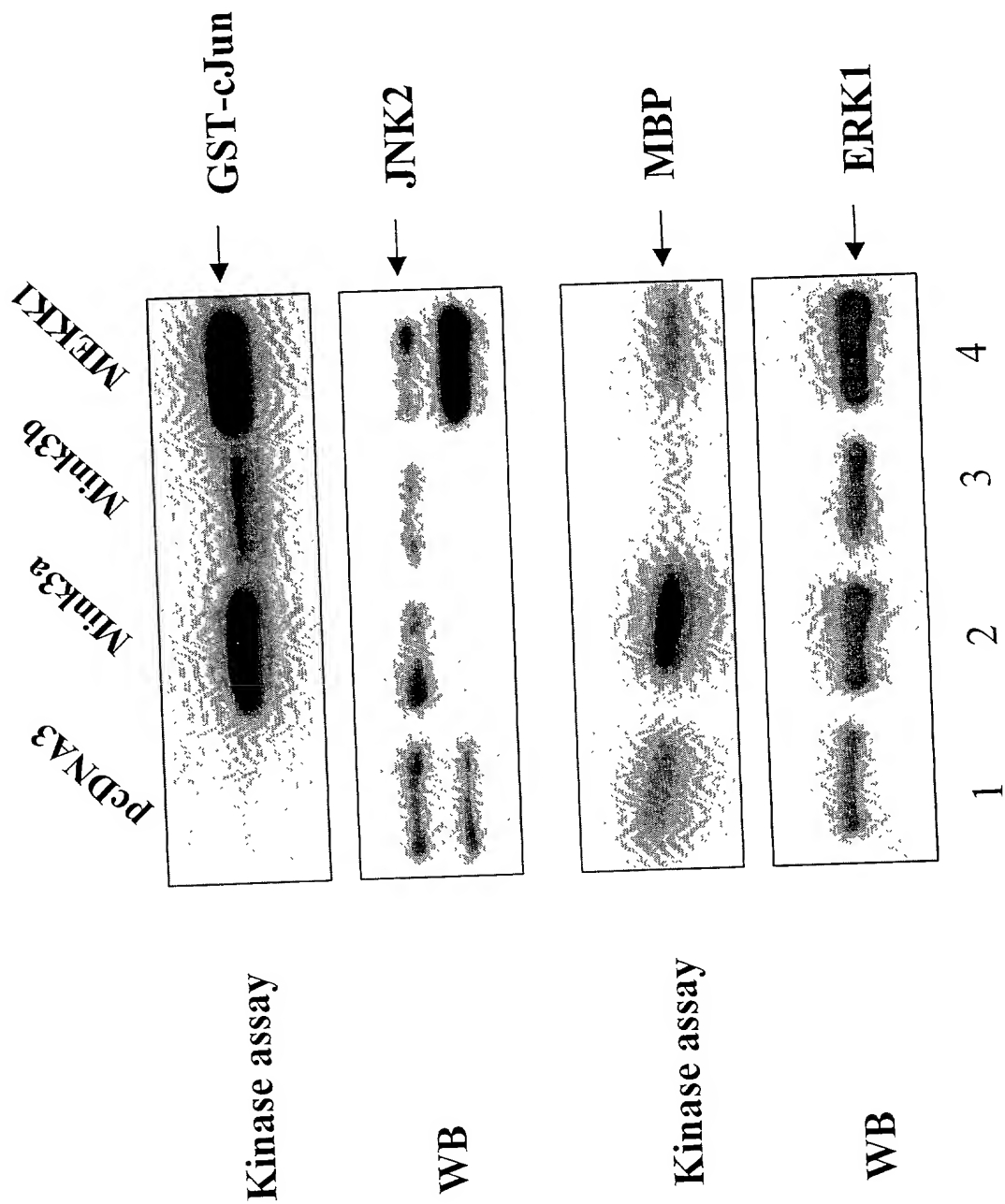


Fig. 13

**Expression of Mink3a in MDA-MB-231 cells causes the  
cellular morphological change**

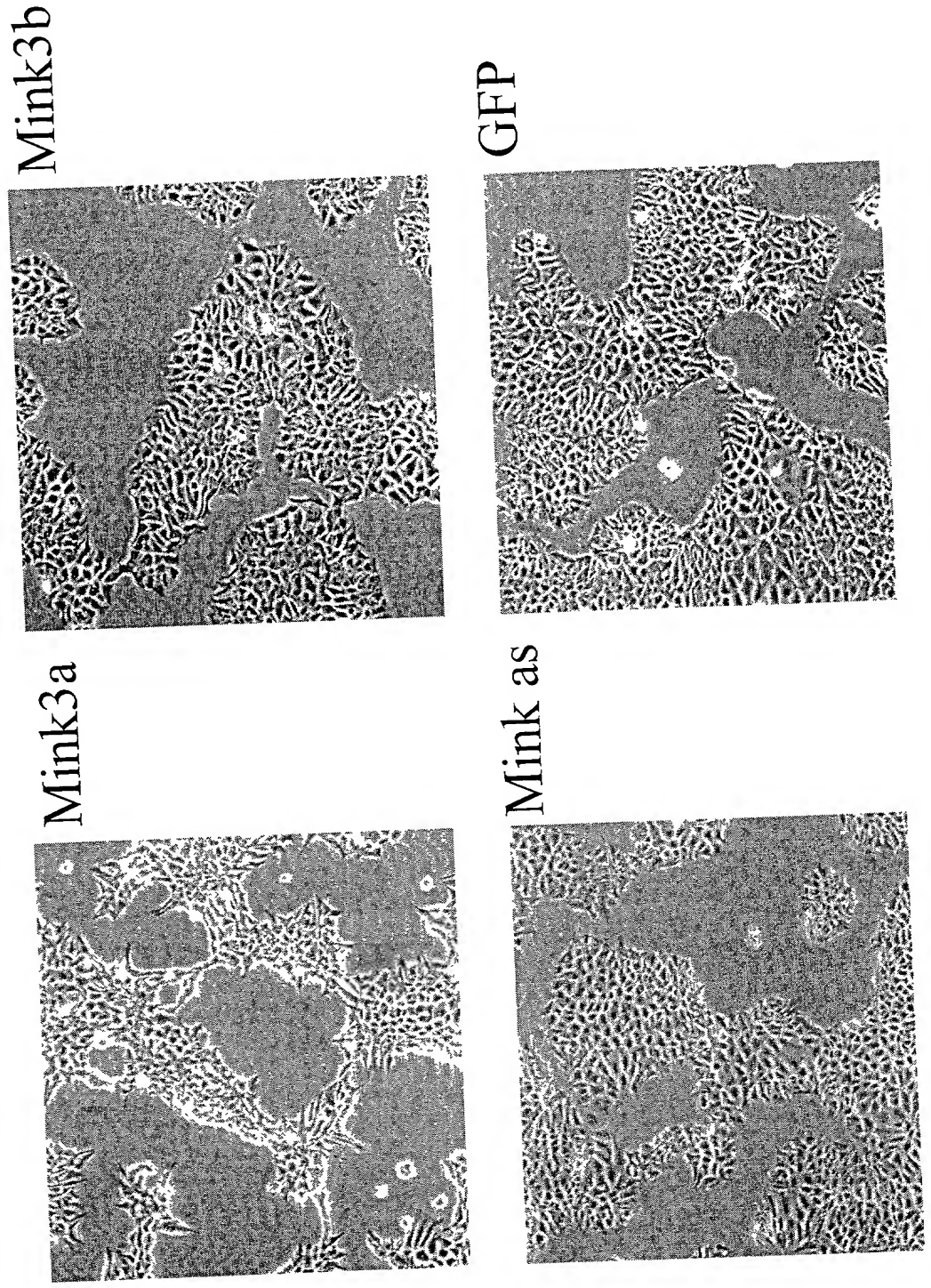
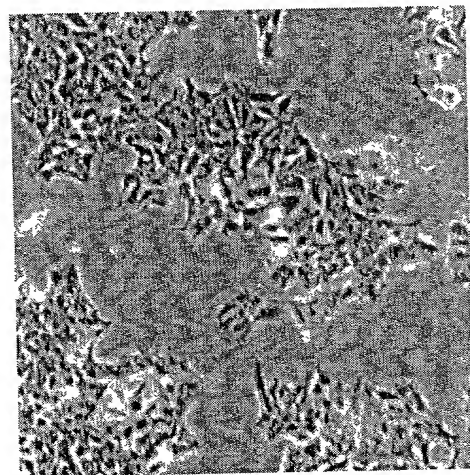
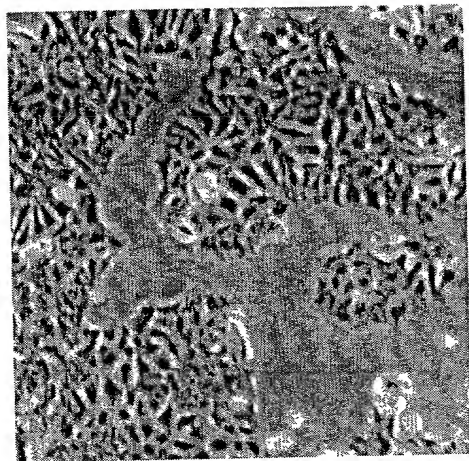


Fig. 14

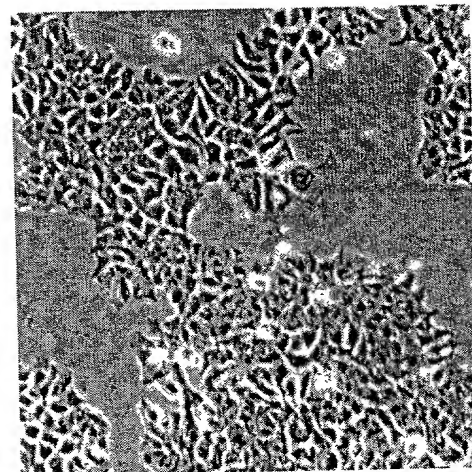
# MEK inhibitor restore the morphology of Mink3a infected MDA-MB-231 cells



Mink3a



Mink3a  
+PD98059



MDA-MB-231